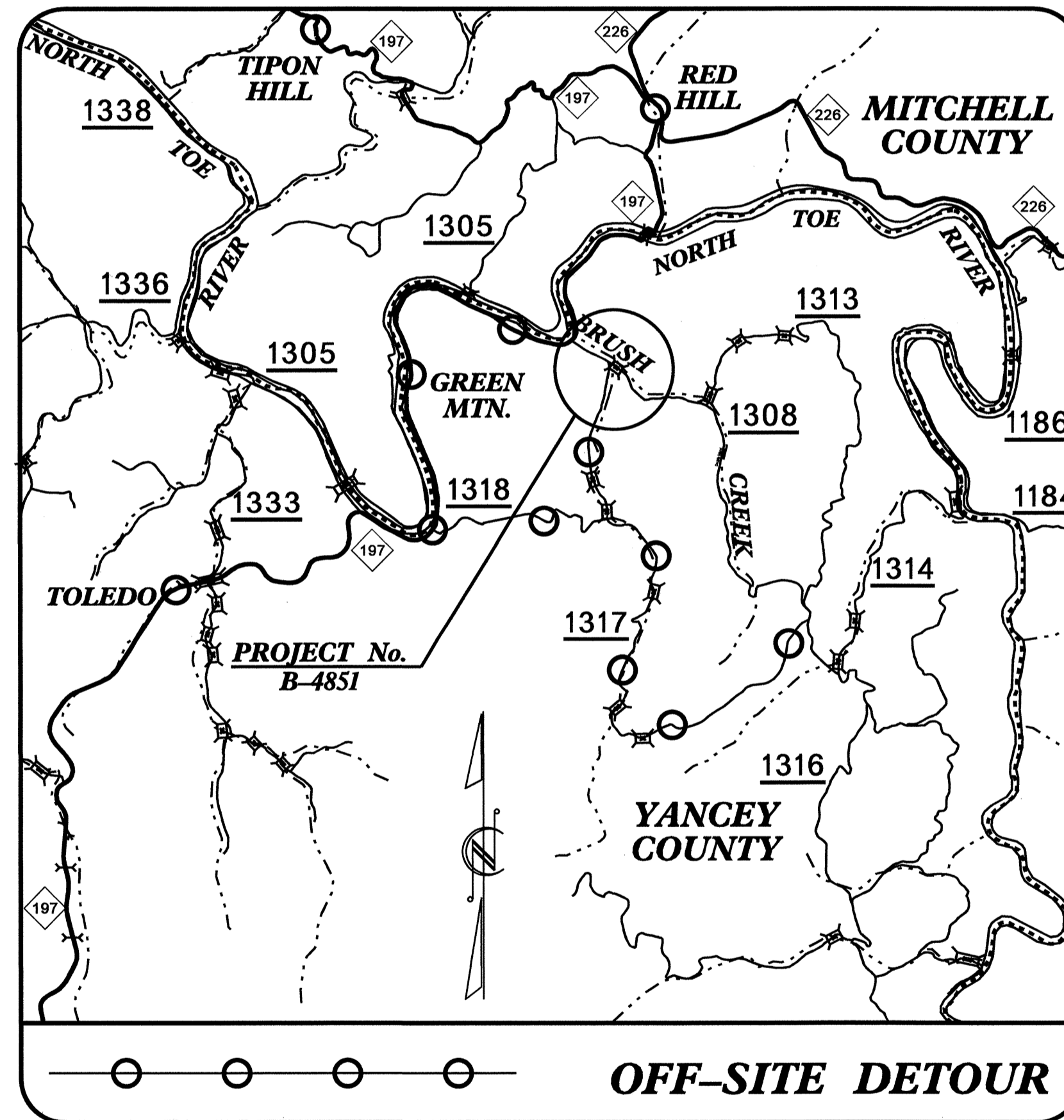


STATE OF NORTH CAROLINA  
DIVISION OF HIGHWAYS

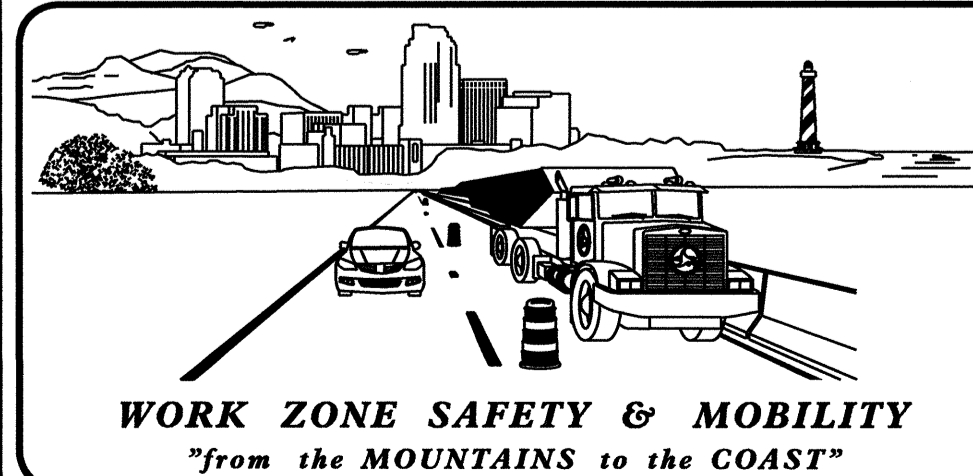
**TRANSPORTATION MANAGEMENT PLAN**

**YANCEY COUNTY**



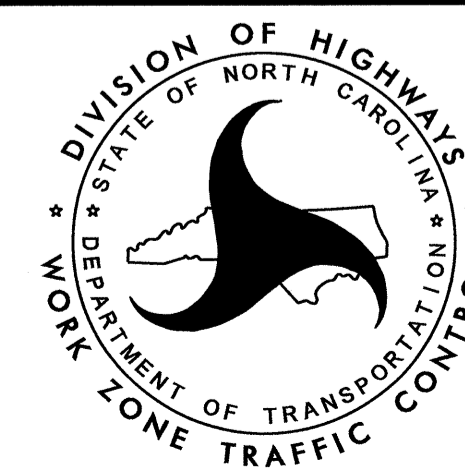
**VICINITY MAP**

LOCATION: REPLACE BRIDGE No. 31 ON SR 1308  
(DOUBLE ISLAND ROAD) OVER BRUSH CREEK.



**N.C.D.O.T. WORK ZONE TRAFFIC CONTROL**  
1561 MAIL SERVICE CENTER (MSC) RALEIGH, NC 27699-1561  
750 N. GREENFIELD PARKWAY, GARNER, NC 27529 (DELIVERY)  
PHONE: (919) 773-2800 FAX: (919) 771-2745

J. S. BOURNE, P.E. STATE TRAFFIC MANAGEMENT ENGINEER  
G. L. GETTER, P.E. TRAFFIC CONTROL PROJECT ENGINEER  
J.W. WOOLARD, P.E. TRAFFIC CONTROL PROJECT DESIGN ENGINEER  
D.A. HAYES, E.I. TRAFFIC CONTROL DESIGN ENGINEER



APPROVED: \_\_\_\_\_  
DATE: \_\_\_\_\_  
SEAL: \_\_\_\_\_  
11/2/11

**INDEX OF SHEETS**

SHEET NO.	TITLE
TMP-1	TITLE SHEET, INDEX OF SHEETS, LIST OF APPLICABLE ROADWAY STANDARD DRAWINGS, LEGEND, AND TEMPORARY PAVEMENT MARKING
TMP-1A	TRANSPORTATION OPERATIONS PLAN: (MANAGEMENT STRATEGIES, GENERAL NOTES AND LOCAL NOTES), AND TEMPORARY TRAFFIC CONTROL PHASING
TMP-2 THRU 3A	OFF-SITE DETOUR
SD-1 THRU SD-2	SPECIAL SIGN DESIGN

**ROADWAY STANDARD DRAWINGS**

THE FOLLOWING ROADWAY STANDARDS AS SHOWN IN "ROADWAY STANDARD DRAWINGS" - PROJECT SERVICES UNIT - N.C. DEPARTMENT OF TRANSPORTATION - RALEIGH, N.C., DATED JULY 2006 ARE APPLICABLE TO THIS PROJECT AND BY REFERENCE HEREBY ARE CONSIDERED A PART OF THESE PLANS:

STD. NO.	TITLE
1101.02	TEMPORARY LANE CLOSURES
1101.03	TEMPORARY ROAD CLOSURES
1101.05	WORK ZONE VEHICLE ACCESSES
1101.06	WARNING SIGNS FOR BLASTING ZONES
1101.11	TRAFFIC CONTROL DESIGN TABLES
1110.01	STATIONARY WORK ZONE SIGNS
1110.02	PORTABLE WORK ZONE SIGNS
1130.01	DRUMS
1135.01	CONES
1145.01	BARRICADES
1150.01	FLAGGING DEVICES
1180.01	SKINNY-DRUM
1205.01	PAVEMENT MARKINGS - LINE TYPES & OFFSETS
1205.02	PAVEMENT MARKINGS - 2 LANE & MULTILANE ROADWAYS
1205.04	PAVEMENT MARKINGS - INTERSECTIONS
1205.05	PAVEMENT MARKINGS - TURN LANES
1205.12	PAVEMENT MARKINGS - BRIDGES
1250.01	PAVEMENT MARKER SPACING
1251.01	RAISED PAVEMENT MARKERS - (TEMPORARY & PERMANENT)
1261.01	GUARDRAIL & BARRIER DELINEATOR SPACING
1261.02	GUARDRAIL & BARRIER DELINEATOR TYPES
1262.01	GUARDRAIL END DELINEATION

**LEGEND**

GENERAL	TRAFFIC CONTROL DEVICES
NORTH ARROW	BARRICADE (TYPE III)
	<b>TEMPORARY PAVEMENT MARKING</b>
	SYMBOL      DESCRIPTION
<b>TEMPORARY SIGNING</b>	TEMPORARY PAVEMENT MARKINGS
STATIONARY SIGN	PAINT (4")
	PA      WHITE EDGELINE
	PI      YELLOW DOUBLE CENTER

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**TIP PROJECT: B-4851**

## PROJECT NOTES

CHANGES MAY BE REQUIRED WHEN PHYSICAL DIMENSIONS IN THE DETAIL DRAWINGS, STANDARD DETAILS AND ROADWAY DETAILS ARE NOT ATTAINABLE TO MEET FIELD CONDITIONS, OR RESULT IN DUPLICATE, OR UNDESIRABLE OVERLAPPING OF DEVICES. MODIFICATION MAY INCLUDE: MOVING, SUPPLEMENTING, COVERING OR REMOVAL OF DEVICES, AS DIRECTED BY THE ENGINEER.

THE FOLLOWING GENERAL NOTES APPLY AT ALL TIMES FOR THE DURATION OF THE CONSTRUCTION PROJECT, EXCEPT WHEN OTHERWISE NOTED IN THE PLAN, OR DIRECTED BY THE ENGINEER.

### TRAFFIC PATTERN ALTERATIONS

- A) NOTIFY THE ENGINEER TWENTY ONE (21) CALENDAR DAYS PRIOR TO ANY TRAFFIC PATTERN ALTERATION.

### SIGNING

- B) PROVIDE SIGNING AND DEVICES REQUIRED TO CLOSE THE ROAD ACCORDING TO THE ROADWAY STANDARD DRAWINGS AND TRAFFIC CONTROL PLANS AND STATE FORCES WILL BE RESPONSIBLE FOR PROVIDING SIGNING REQUIRED FOR THE OFF-SITE DETOUR ROUTE AS SHOWN IN THE TRAFFIC CONTROL PLANS.
- C) COVER OR REMOVE ALL SIGNS AND DEVICES REQUIRED TO CLOSE THE ROAD WHEN ROAD CLOSURE IS NOT IN OPERATION AND COVER OR REMOVE ALL SIGNS REQUIRED FOR THE OFF-SITE DETOUR WHEN THE DETOUR IS NOT IN OPERATION.

- D) ENSURE ALL NECESSARY SIGNING IS IN PLACE PRIOR TO ALTERING ANY TRAFFIC PATTERN.

### TRAFFIC CONTROL DEVICES

- E) PLACE TYPE III BARRICADES, WITH "ROAD CLOSED" SIGN R11-2 ATTACHED, OF SUFFICIENT LENGTH TO CLOSE ENTIRE ROADWAY.

### PAVEMENT MARKINGS AND MARKERS

- F) INSTALL PAVEMENT MARKINGS AND PAVEMENT MARKERS ON THE FINAL SURFACE AS SHOWN IN THE FINAL PAVEMENT MARKING PLAN.
- G) TIE PROPOSED PAVEMENT MARKING LINES TO EXISTING PAVEMENT MARKING LINES.

## PROJECT NOTES (FOR "A" SHEETS)

### LANE AND SHOULDER CLOSURE REQUIREMENTS

- AA) REMOVE LANE CLOSURE DEVICES FROM THE LANE WHEN WORK IS NOT BEING PERFORMED BEHIND THE LANE CLOSURE OR WHEN A LANE CLOSURE IS NO LONGER NEEDED, OR AS DIRECTED BY THE ENGINEER.
- BA) WHEN PERSONNEL AND/OR EQUIPMENT ARE WORKING ON THE SHOULDER ADJACENT TO AN UNDIVIDED FACILITY AND WITHIN 5 FT OF AN OPEN TRAVEL LANE, CLOSE THE NEAREST OPEN TRAVEL LANE USING ROADWAY STANDARD DRAWING NO. 1101.02 UNLESS THE WORK AREA IS PROTECTED BY BARRIER OR GUARDRAIL.
- CA) WHEN PERSONNEL AND/OR EQUIPMENT ARE WORKING WITHIN A LANE OF TRAVEL OF AN UNDIVIDED OR DIVIDED FACILITY, CLOSE THE LANE ACCORDING TO THE TRAFFIC CONTROL PLANS, ROADWAY STANDARD DRAWINGS OR AS DIRECTED BY THE ENGINEER. CONDUCT THE WORK SO THAT ALL PERSONNEL AND/OR EQUIPMENT REMAIN WITHIN THE CLOSED TRAVEL LANE.
- DA) DO NOT WORK SIMULTANEOUSLY WITHIN 15 FT ON BOTH SIDES OF AN OPEN TRAVELWAY, RAMP OR LOOP WITHIN THE SAME LOCATION UNLESS PROTECTED WITH GUARDRAIL OR BARRIER.
- EA) DO NOT INSTALL MORE THAN ONE LANE CLOSURE, IN ANY ONE DIRECTION, ON ENTIRE PROJECT.
- FA) PROVIDE TRAFFIC CONTROL FOR APPROPRIATE LANE CLOSURES FOR SURVEYING DONE BY THE DEPARTMENT.

### PAVEMENT EDGE DROP OFF REQUIREMENTS

- GA) BACKFILL AT A 6:1 SLOPE UP TO THE EDGE AND ELEVATION OF EXISTING PAVEMENT IN AREAS ADJACENT TO AN OPENED TRAVEL LANE THAT HAS AN EDGE OF PAVEMENT DROP-OFF AS FOLLOWS:
- BACKFILL DROP-OFFS THAT EXCEED 2 INCHES ON ROADWAYS WITH POSTED SPEED LIMITS OF 45 MPH OR GREATER.
- BACKFILL DROP-OFFS THAT EXCEED 3 INCHES ON ROADWAYS WITH POSTED SPEED LIMITS LESS THAN 45 MPH.
- BACKFILL WITH SUITABLE COMPACTED MATERIAL, AS APPROVED BY THE ENGINEER, AT NO EXPENSE TO THE DEPARTMENT.
- HA) DO NOT EXCEED A DIFFERENCE OF 2 INCHES IN ELEVATION BETWEEN OPEN LANES OF TRAFFIC FOR NOMINAL LIFTS OF 1.5 INCHES. INSTALL ADVANCE WARNING "UNEVEN LANES" SIGNS (W8-11) 350 FT IN ADVANCE OF THE UNEVEN AREA.

### SIGNING

- IA) INSTALL ADVANCE WORK ZONE WARNING SIGNS WHEN WORK IS WITHIN 40 FT FROM THE EDGE OF TRAVEL LANE AND NO MORE THAN THREE (3) DAYS PRIOR TO THE BEGINNING OF CONSTRUCTION.
- JA) INSTALL BLACK ON ORANGE "DIP" SIGNS (W8-2) AND/OR "BUMP" SIGNS (W8-1) 350 FT IN ADVANCE OF THE UNEVEN AREA, OR AS DIRECTED BY THE ENGINEER.

### TRAFFIC CONTROL DEVICES

- KA) SPACE CHANNELIZING DEVICES IN WORK AREAS NO GREATER IN FEET THAN TWICE THE POSTED SPEED LIMIT (MPH), EXCEPT 10 FT ON-CENTER IN RADII, AND 3 FT OFF THE EDGE OF AN OPEN TRAVELWAY, WHEN LANE CLOSURES ARE NOT IN EFFECT. WHEN SKINNY DRUMS ARE ALLOWED, REFER TO SECTION 1180 OF STANDARD SPECIFICATIONS FOR ROADS AND STRUCTURES OR AS SHOWN IN THE PLANS.
- LA) PLACE ADDITIONAL SETS OF THREE CHANNELIZING DEVICES PERPENDICULAR TO THE EDGE OF TRAVELWAY ON 500 FT CENTERS WHEN UNOPENED LANES ARE CLOSED TO TRAFFIC.

### PAVEMENT MARKINGS AND MARKERS

- MA) INSTALL TEMPORARY PAVEMENT MARKINGS AND TEMPORARY PAVEMENT MARKERS ON INTERIM LAYERS OF PAVEMENT AS FOLLOWS:

ROAD NAME	MARKING	MARKER
1. DOUBLE ISLAND ROAD	PAINT	TEMPORARY

- NA) PLACE ONE APPLICATION OF PAINT FOR TEMPORARY TRAFFIC PATTERNS. PLACE A SECOND APPLICATION OF PAINT SIX (6) MONTHS AFTER THE INITIAL APPLICATION AND EVERY SIX MONTHS AS DIRECTED BY THE ENGINEER.

## MANAGEMENT STRATEGIES

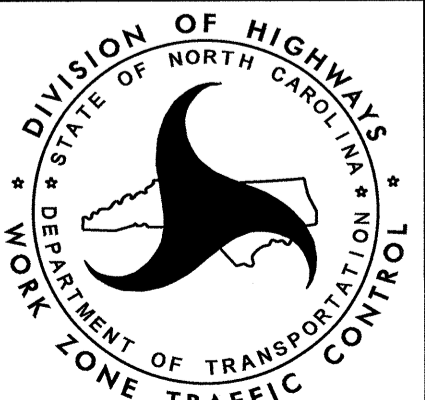
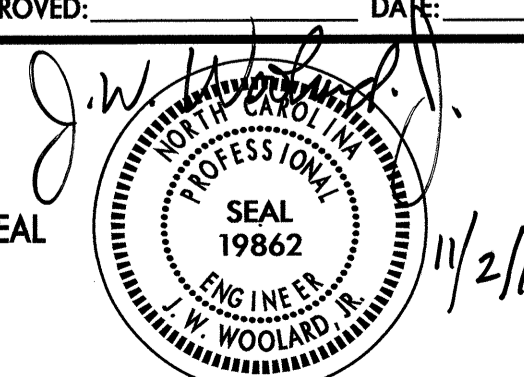
THIS PROJECT IS TO MAINTAIN TRAFFIC DURING CONSTRUCTION USING OFF-SITE DETOURS. IN THE EVENT THAT -Y- AND -L- WEST OF THE BRIDGE IS COMPLETED PRIOR TO THE COMPETITION OF THE BRIDGE CONSTRUCTION, -Y- AND -L- 'WEST' MAY BE OPENED TO TRAFFIC.

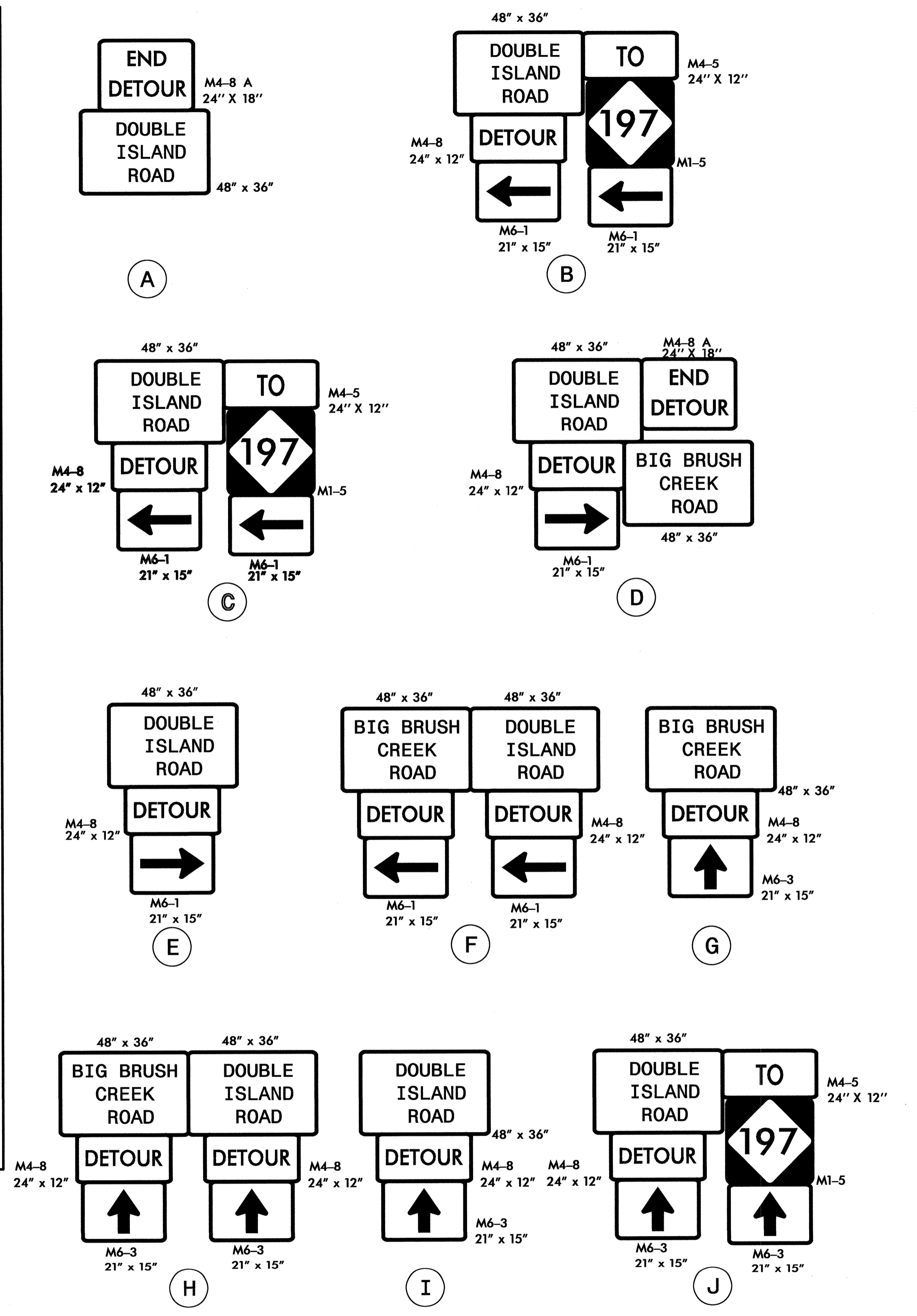
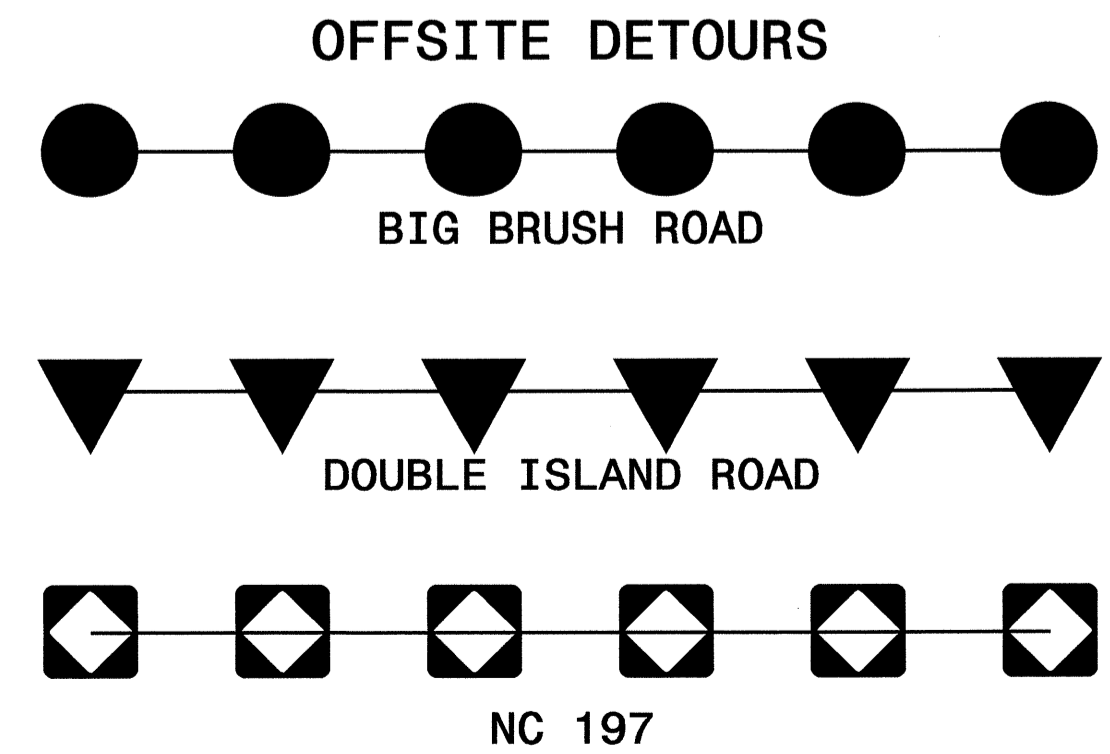
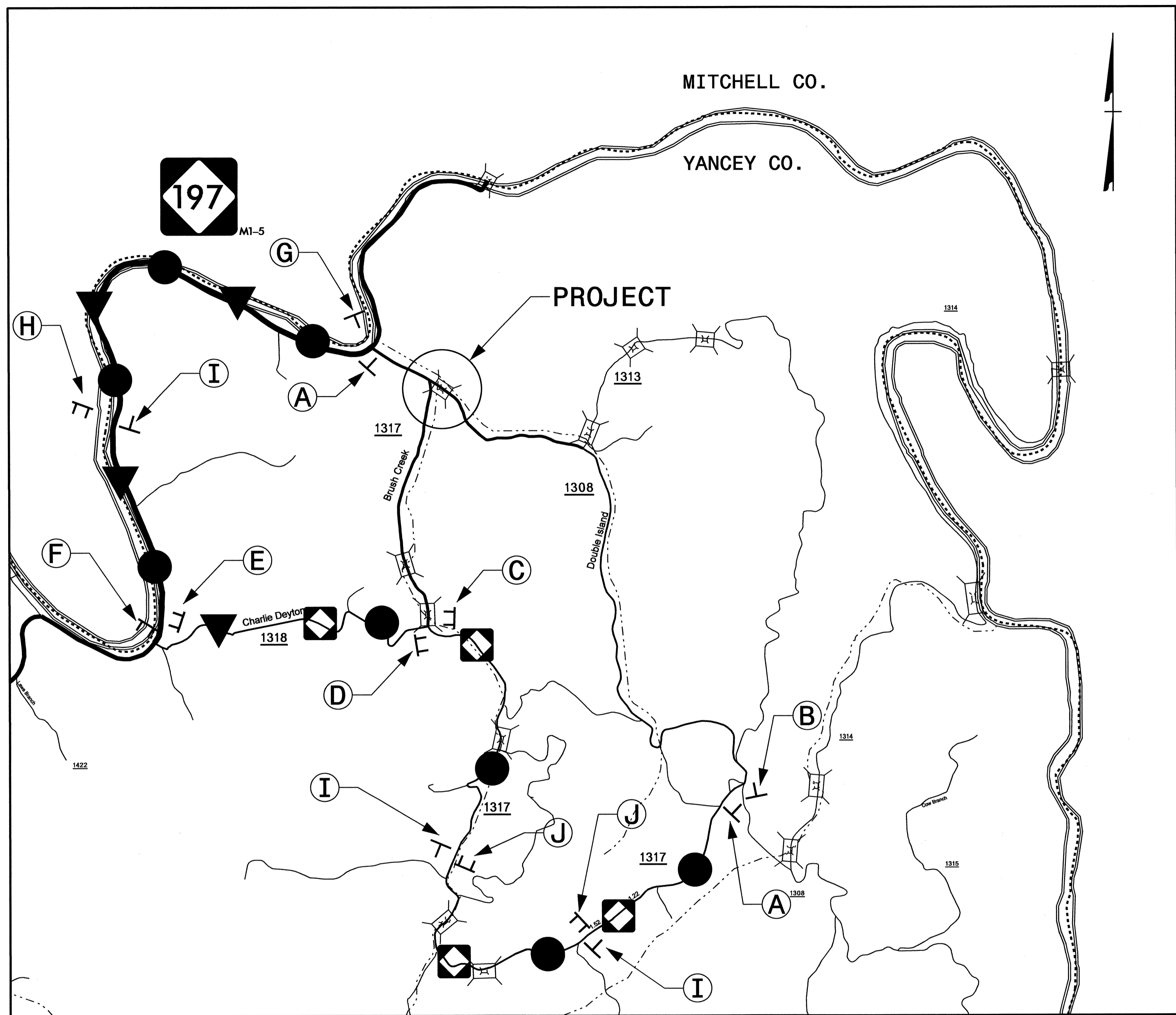
## PHASING

- STEP 1) INSTALL ALL SIGNING AND COVER (SEE TMP-02 & 02A).
- STEP 2) REMOVE SIGN COVERS, DETOUR TRAFFIC OFFSITE, CLOSE -L- AND -Y- WITH TYPE III BARRICADES (SEE TMP-02 & 03), AND CONSTRUCT THE ENTIRE PROJECT UP TO BUT NOT INCLUDING THE FINAL LIFT OF SURFACE COURSE.

NOTE: IF -L- 'WEST' OF BRIDGE AND -Y- CONSTRUCTION IS COMPLETED PRIOR TO COMPLETING CONSTRUCTION OF THE BRIDGE, SHEETS TMP-02A AND TMP-03A MAY BE USED AT THE DISCRETION OF THE ENGINEER.

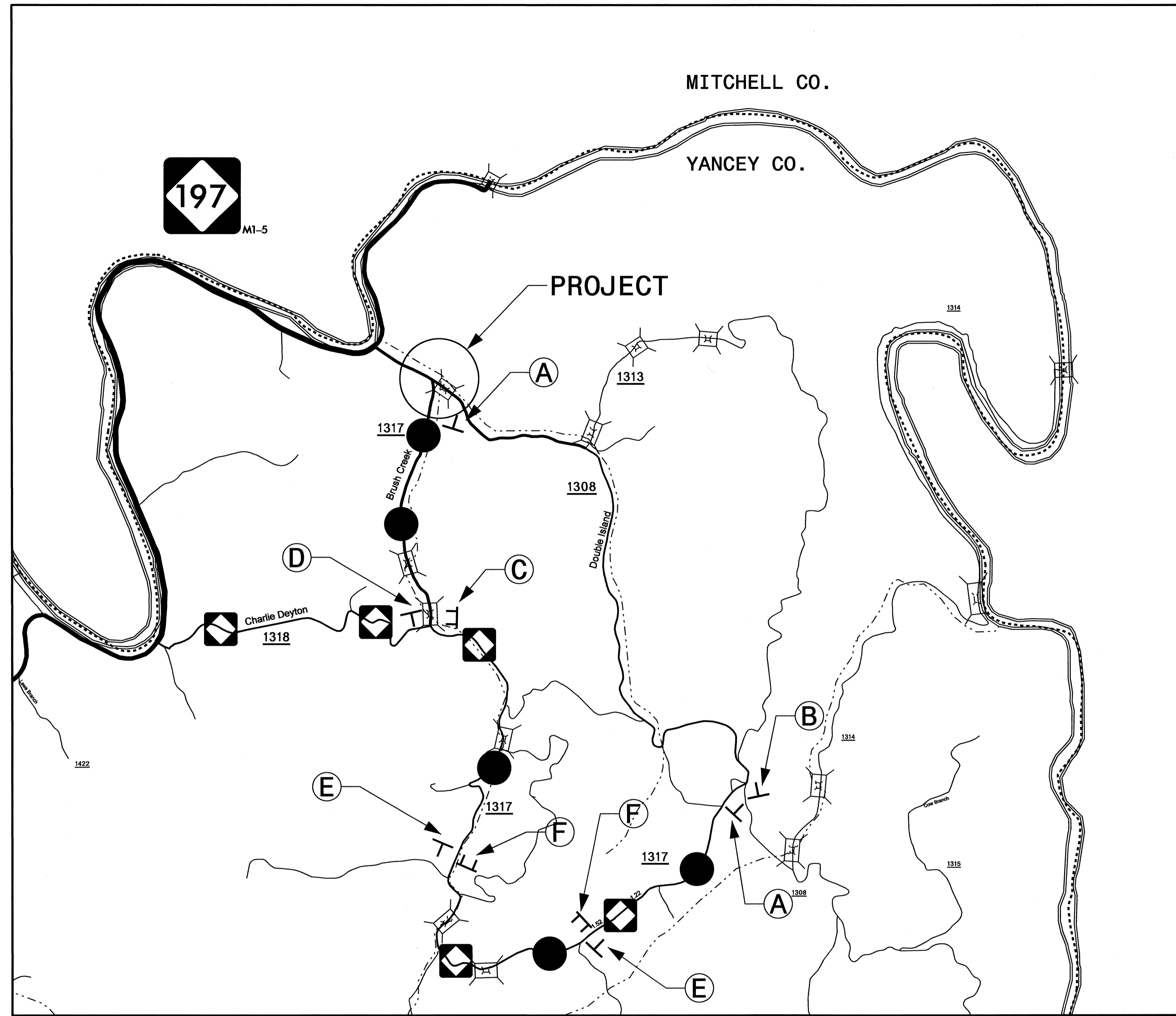
- STEP 3) INSTALL THE FINAL LIFT OF SURFACE COURSE, FINAL PAVEMENT MARKINGS, AND FINAL PAVEMENT MARKERS (SEE FINAL PAVEMENT MARKING PLAN) ON ENTIRE PROJECT.
- STEP 4) REMOVE ALL TRAFFIC CONTROL DEVICES, OPEN ENTIRE PROJECT TO THE FINAL TRAFFIC PATTERN, AND REMOVE ALL SIGNING.

APPROVED: _____ SEAL	DATE: 11/2/11		<p>TRANSPORTATION OPERATION PLAN</p>
			

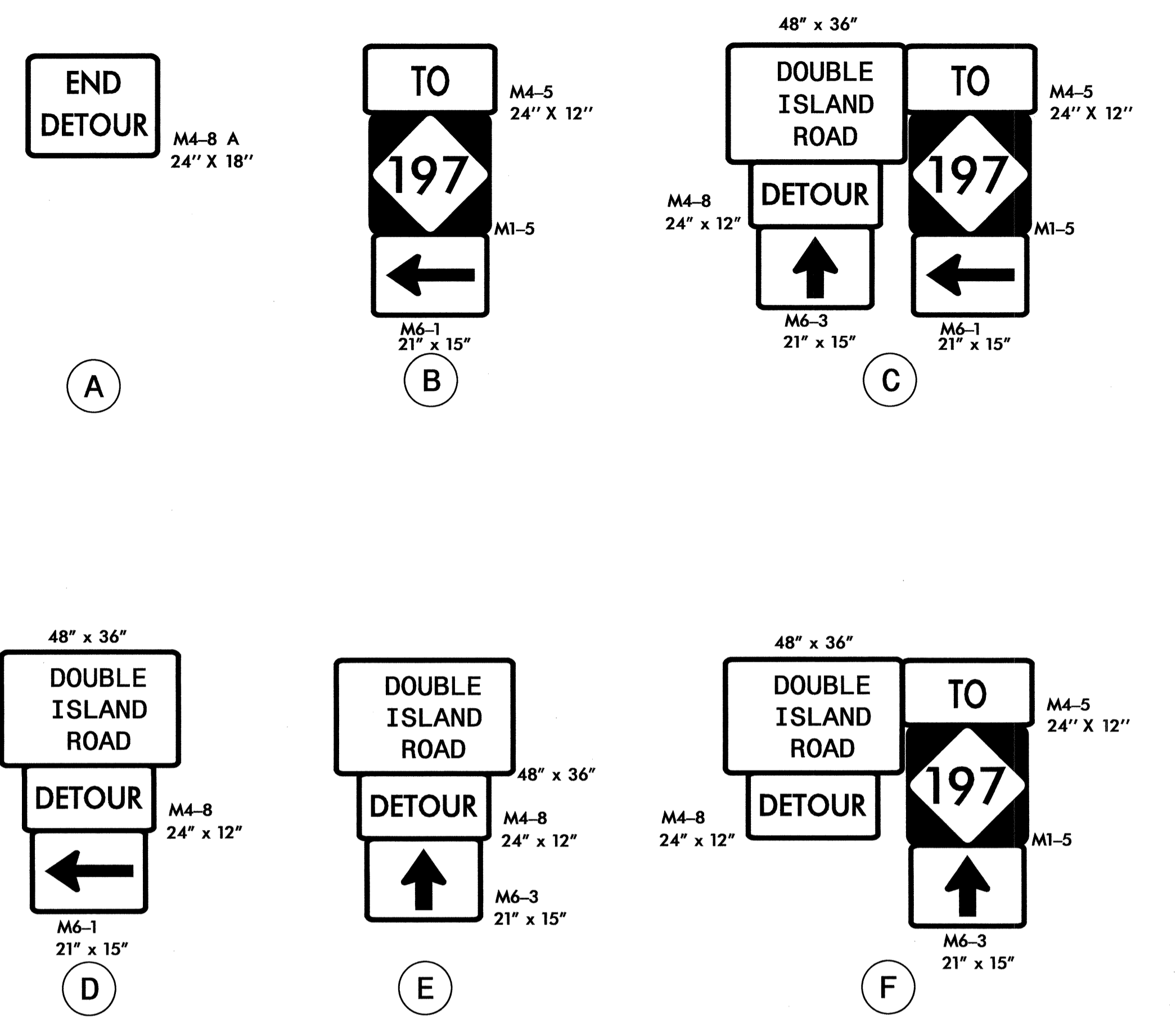
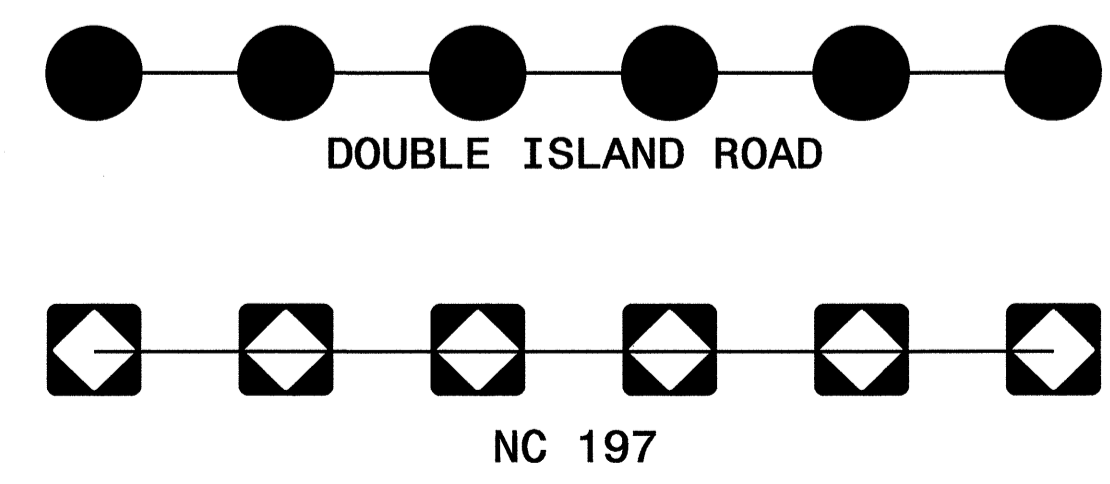


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SEAL			

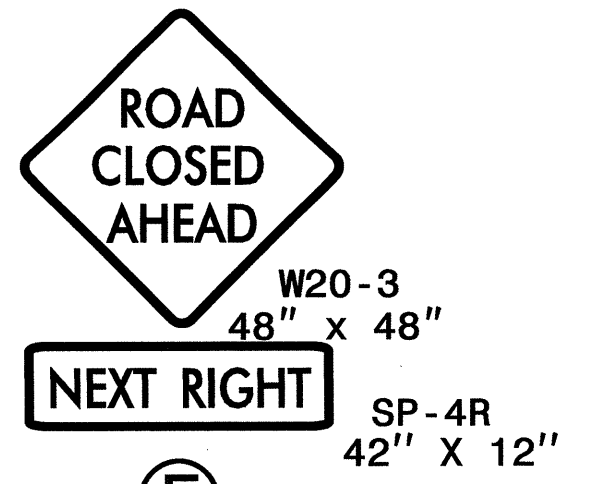
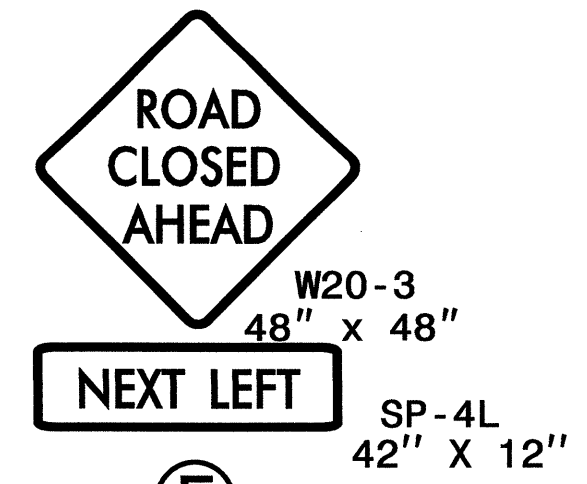
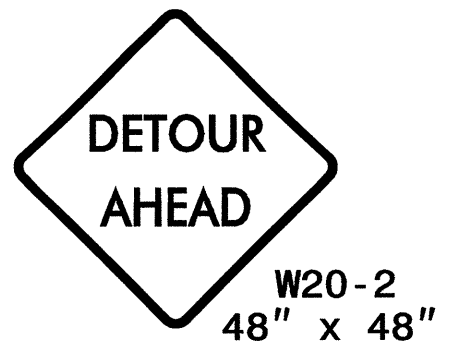
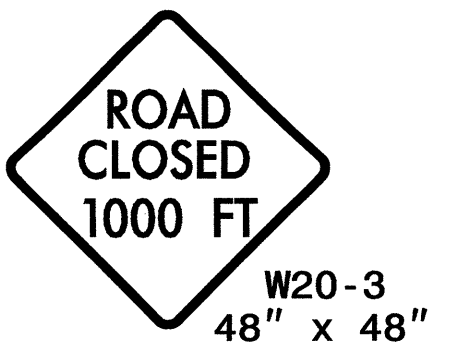
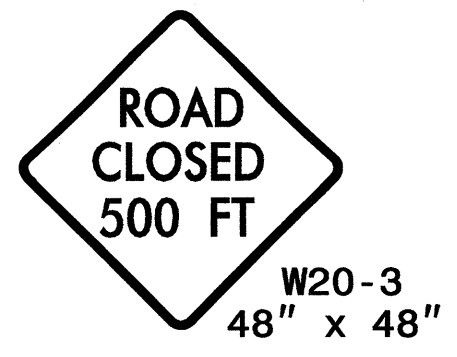
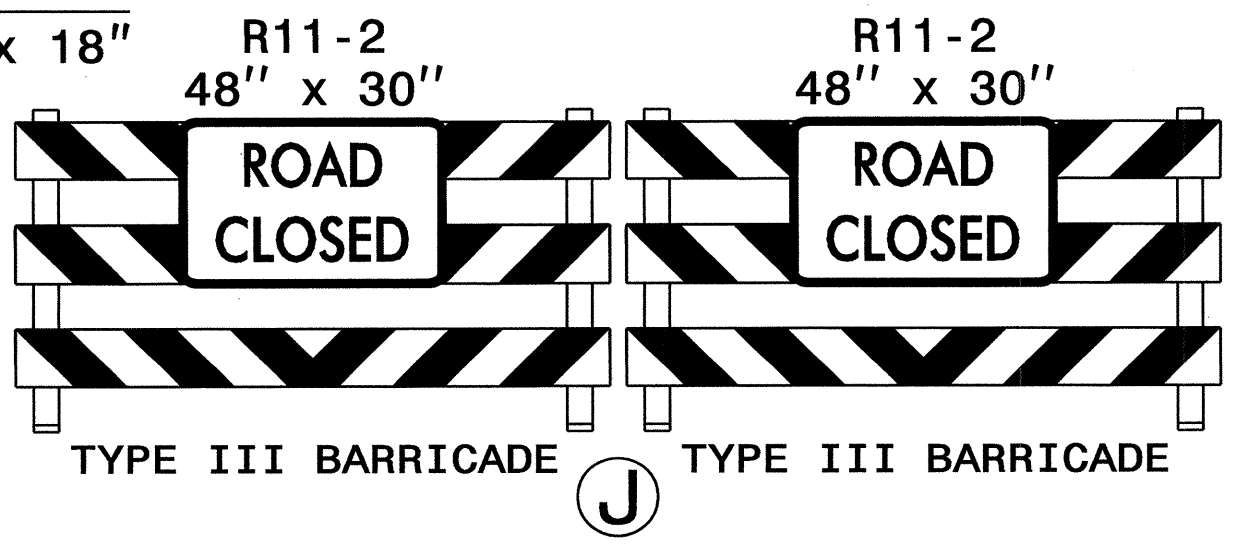
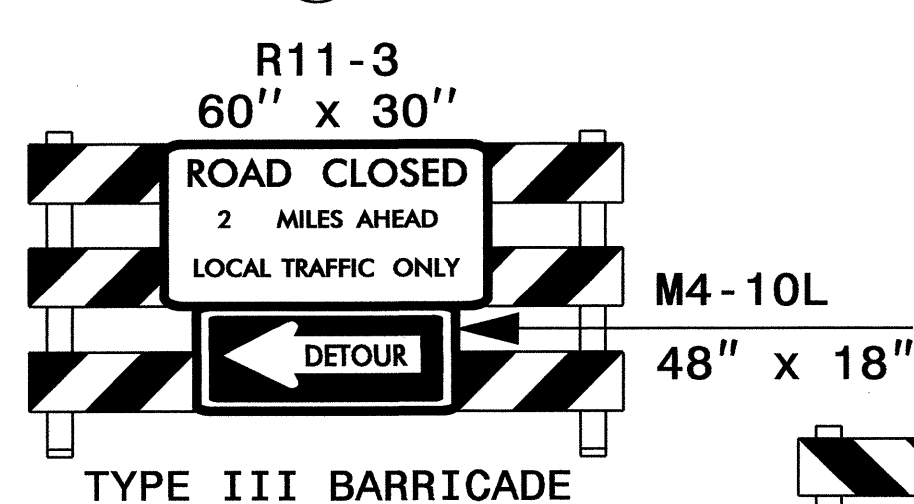
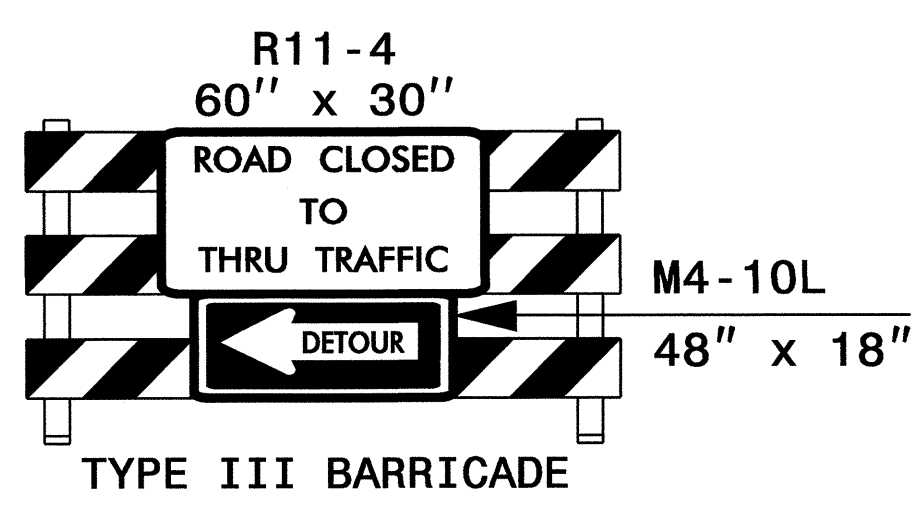
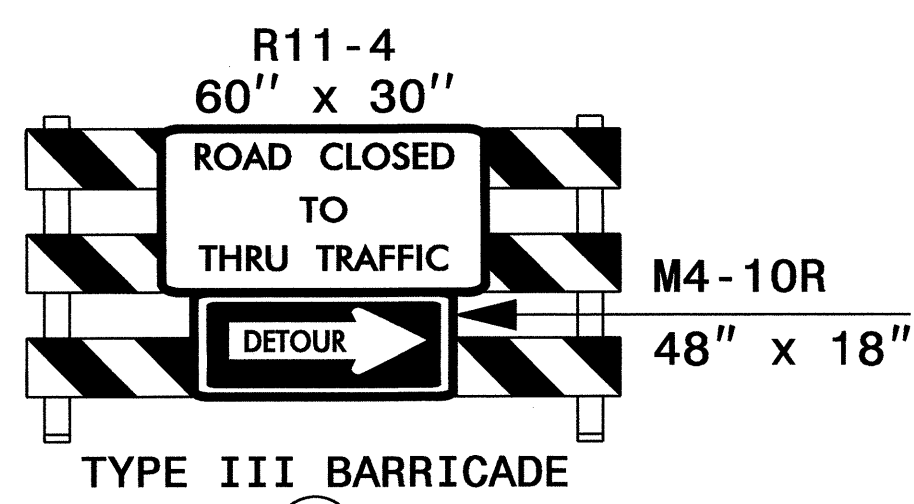
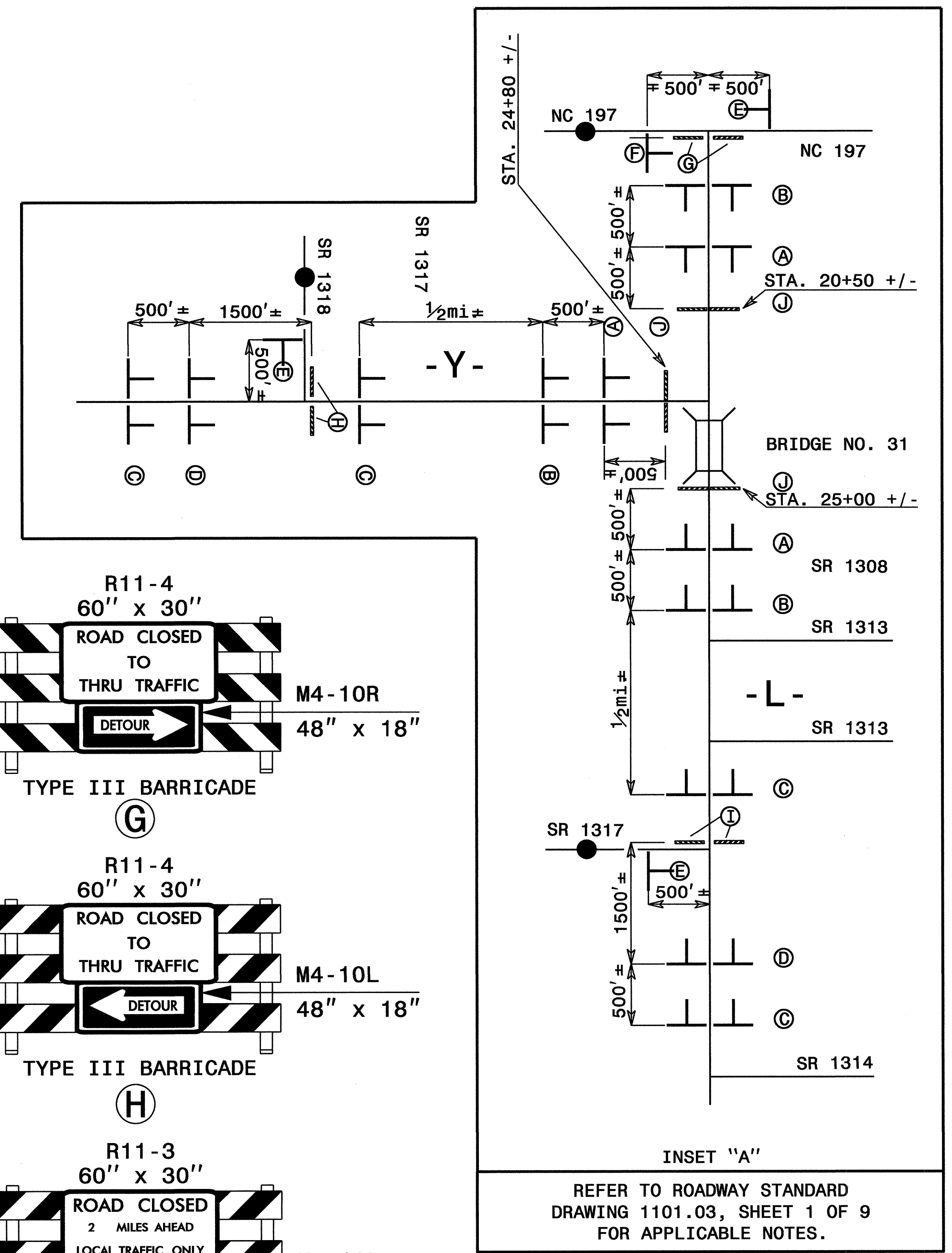
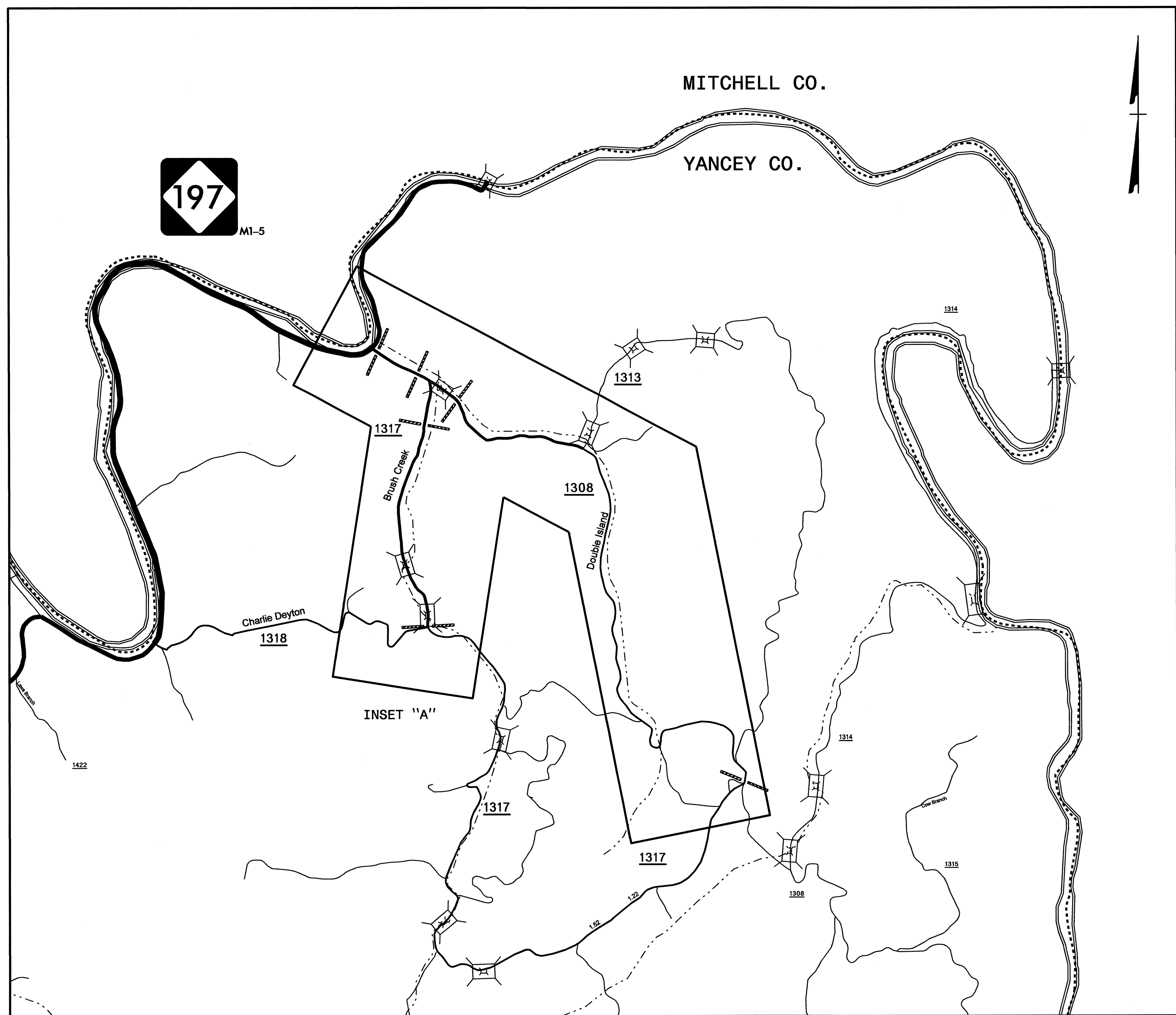


OFFSITE DETOURS



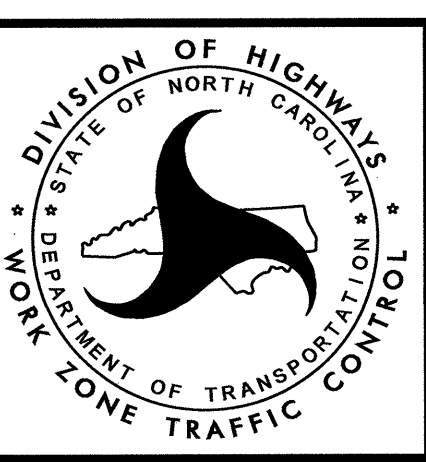
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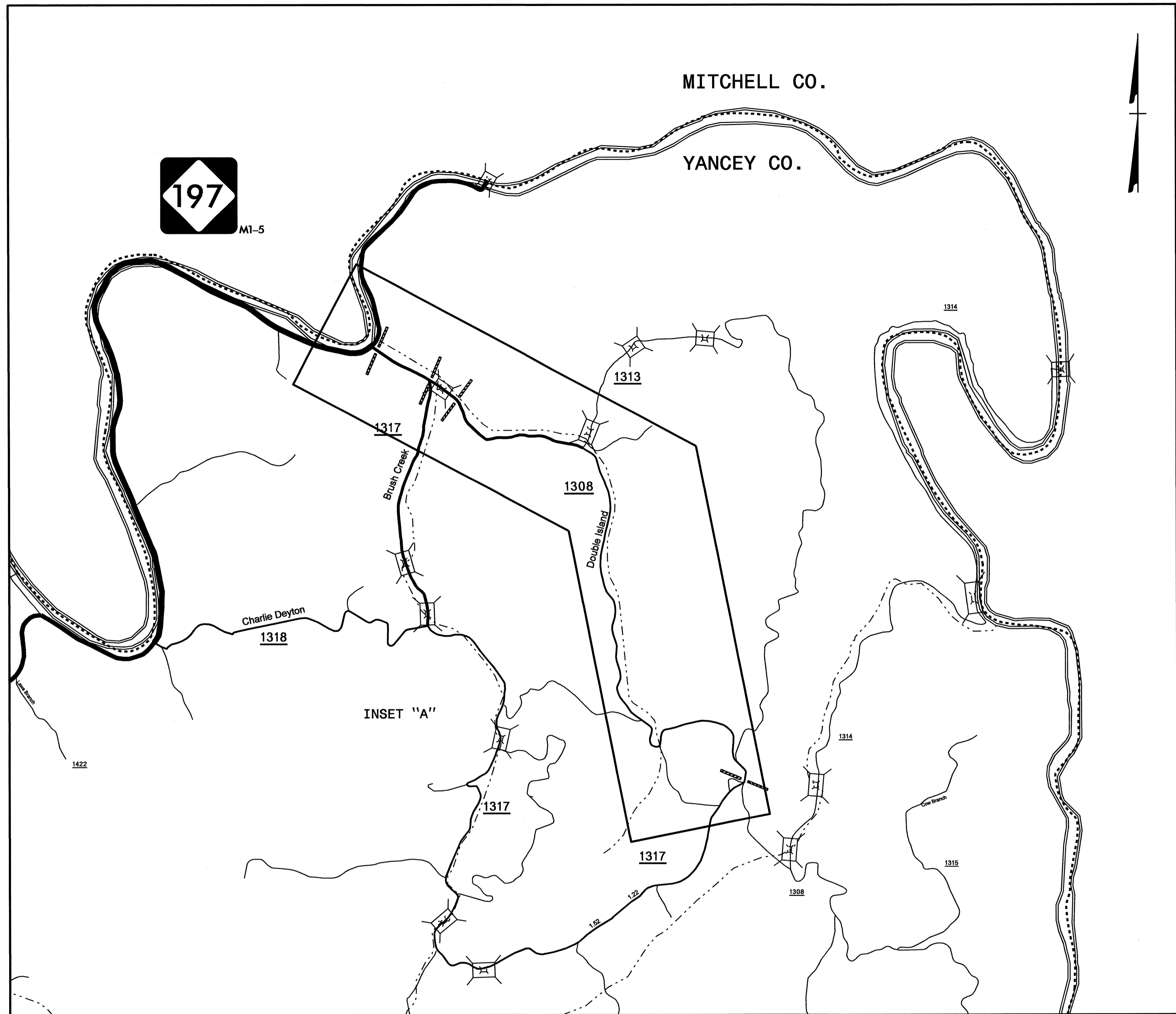


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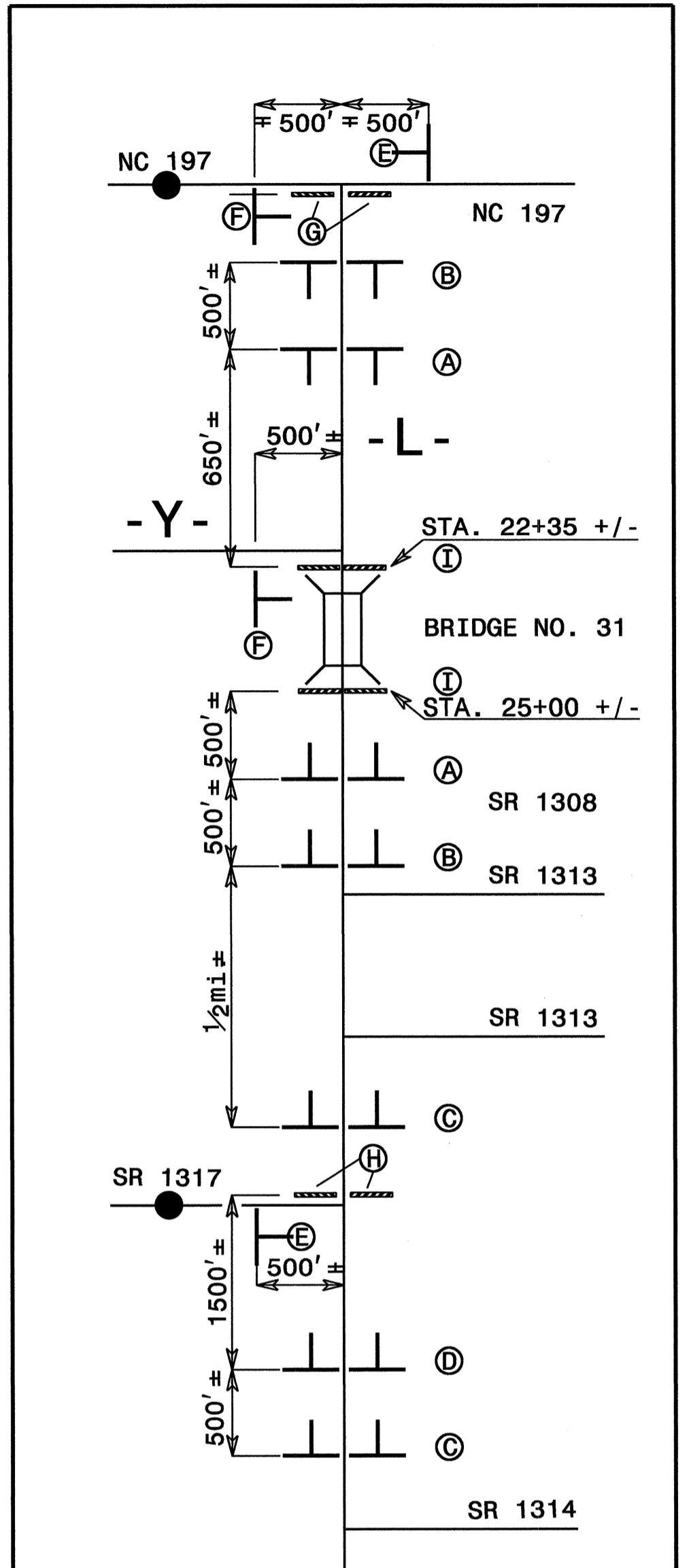
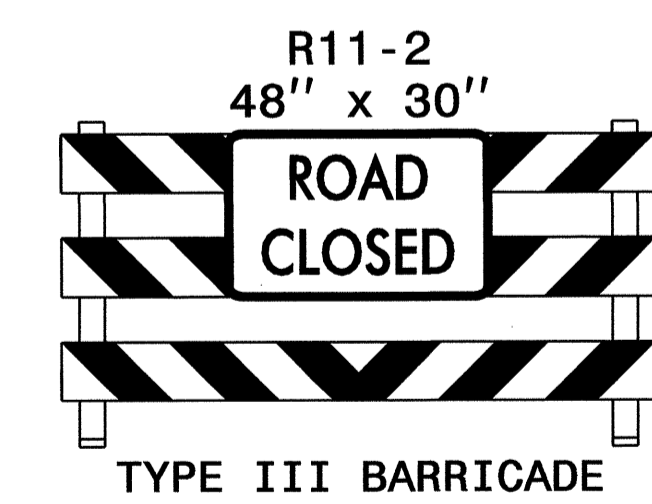
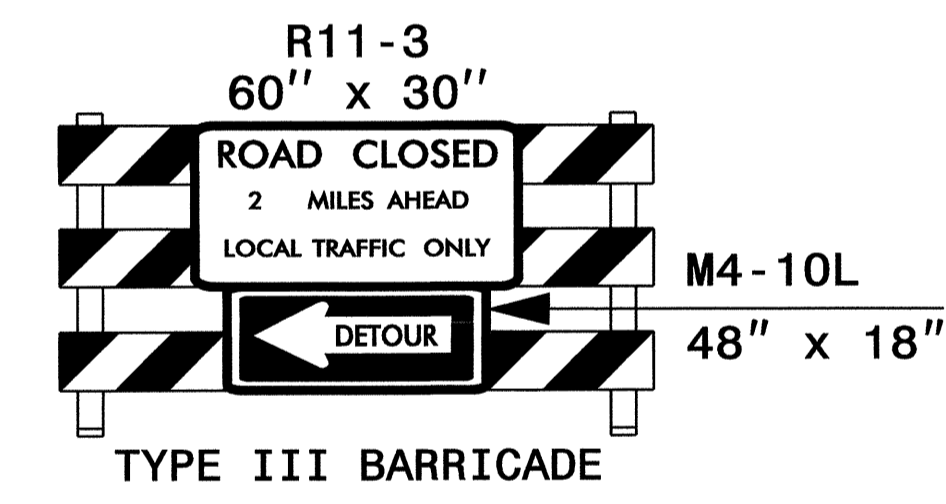
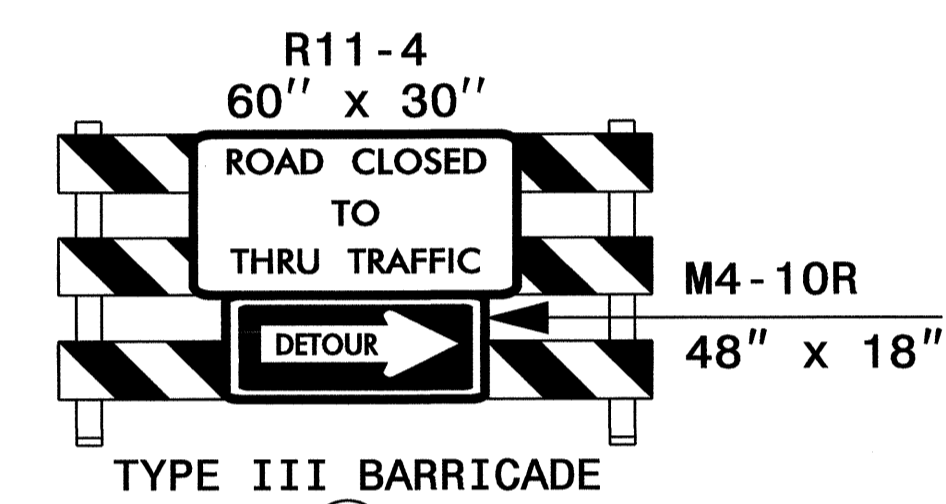
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**OFFSITE DETOUR:  
 DETOUR SIGNING**

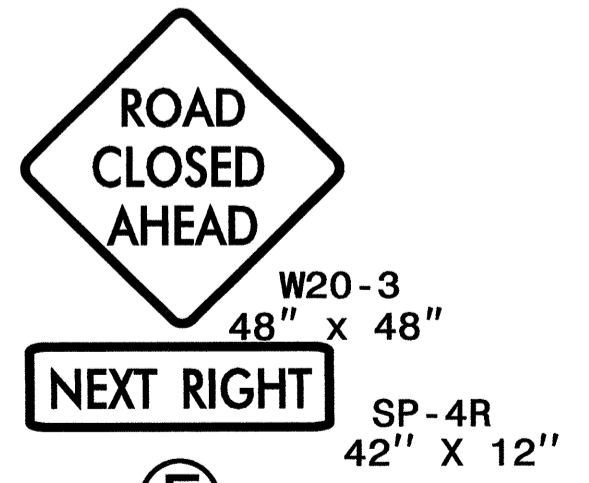
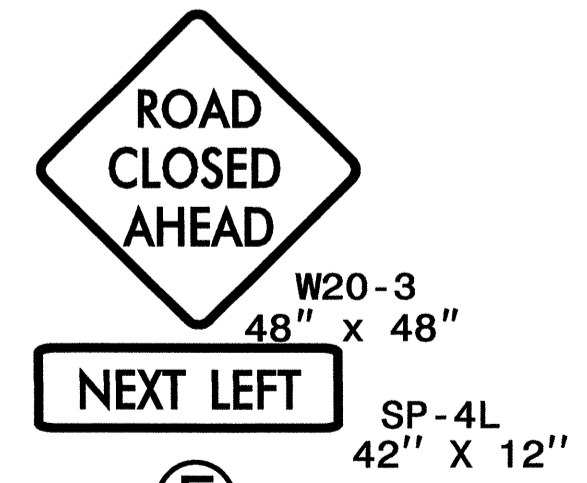
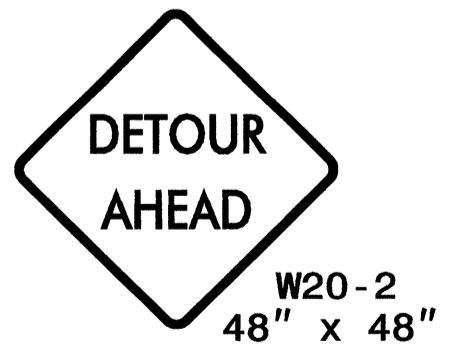
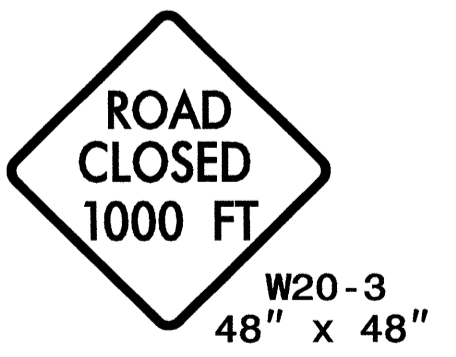
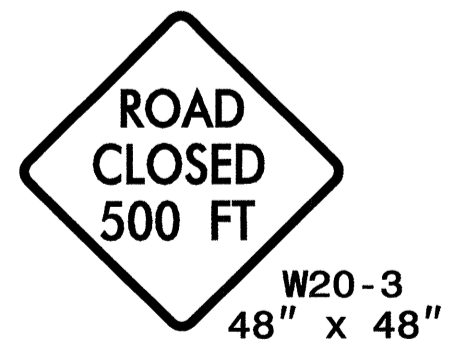


INSET "A"



INSET "A"  
 REFER TO ROADWAY STANDARD DRAWING 1101.03, SHEET 1 OF 9 FOR APPLICABLE NOTES.  
 REFER TO ROADWAY STANDARD DRAWING 1101.01, SHEET 3 OF 3 FOR -Y-.

NOTE: USE THIS DETAIL IF -Y- (BIG BRUSH CREEK ROAD) CONSTRUCTION IS COMPLETE AND -Y- IS OPENED TO TRAFFIC.



APPROVED: \_\_\_\_\_ DATE: \_\_\_\_\_  
 SEAL  
  
 W. WOOLARD, JR.  
 ENGINEER  
 11/2/11

DIVISION OF HIGHWAYS  
 STATE OF NORTH CAROLINA  
 DEPARTMENT OF TRANSPORTATION  
 WORK ZONE TRAFFIC CONTROL

OFFSITE DETOUR:  
 DETOUR SIGNING

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